

## **ABSTRACT OF THE DISCLOSURE**

An immunochemical assay device is proposed. The immunochemical assay device includes a base member, a liquid-flowing layer disposed on the base member and a light-permissible member attached on the liquid-flowing layer. A gap is interposed between the light-permissible member and the liquid-flowing layer, wherein at least an immobilized substance is disposed on the surface of the light-permissible member facing the liquid-flowing layer. The immobilized substance binds to a specific ligand-receptor complex contained in a liquid sample to form an assay marker after the liquid sample has been added into the gap. The liquid sample flows in a microfluidic environment formed between the light-permissible member and the liquid-flowing layer and reacts with the immobilized substance to produce a colored assay marker on the light-permissible member. As the light-permissible member provides better transmission of light than previously known paper materials do, the assay marker can be easily detected by human eyes.